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**Permit No. UT0023663  
Minor Municipal**

STATE OF UTAH  
DIVISION OF WATER QUALITY  
DEPARTMENT OF ENVIRONMENTAL QUALITY  
SALT LAKE CITY, UTAH

AUTHORIZATION TO DISCHARGE UNDER THE  
UTAH POLLUTANT DISCHARGE ELIMINATION SYSTEM  
(UPDES)

In compliance with provisions of the *Utah Water Quality Act, Title 19, Chapter 5, Utah Code Annotated ("UCA") 1953, as amended* (the "Act"),

**Castle Valley Special Service District and Castle Dale City Lagoons**

are hereby authorized to discharge from its facility located approximately 1 mile east of Castle Dale City, Emery County, Utah, with the outfall located at latitude 39° 11' 30" and longitude 111° 00' 30", to receiving waters named,

**Cottonwood Creek (tributary to the Colorado River)**

in accordance with the discharge point, effluent limitations, monitoring requirements and other conditions set forth herein.

This permit shall become effective on August 1, 2010.

This permit and the authorization to discharge shall expire at midnight, July 31, 2015.

Signed this 17<sup>th</sup> day of June 2010



Walter L. Baker, P.E.  
Executive Secretary  
Utah Water Quality Board

Document Date 1/13/2010



DWQ-2009-011141

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**I. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS**

**A. Definitions.**

1. The "30-day (and monthly) average," other than for E. coli bacteria, is the arithmetic average of all samples collected during a consecutive 30-day period or calendar month, whichever is applicable. Geometric means shall be calculated for E. coli bacteria. The calendar month shall be used for purposes of reporting self-monitoring data on discharge monitoring report forms.
2. The "7-day (and weekly) average", other than for E. coli bacteria, is the arithmetic average of all samples collected during a consecutive 7-day period or calendar week, whichever is applicable. Geometric means shall be calculated for E. coli bacteria. The 7-day and weekly averages are applicable only to those effluent characteristics for which there are 7-day average effluent limitations. The calendar week, which begins on Sunday and ends on Saturday, shall be used for purposes of reporting self-monitoring data on discharge monitoring report forms. Weekly averages shall be calculated for all calendar weeks with Saturdays in the month. If a calendar week overlaps two months (i.e., the Sunday is in one month and the Saturday in the following month), the weekly average calculated for that calendar week shall be included in the data for the month that contains the Saturday.
3. "Daily Maximum" (Daily Max.) is the maximum value allowable in any single sample or instantaneous measurement.
4. A "grab" sample, for monitoring requirements, is defined as a single "dip and take" sample collected at a representative point in the discharge stream.
5. An "instantaneous" measurement, for monitoring requirements, is defined as a single reading, observation, or measurement.
6. "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.
7. "Bypass" means the diversion of waste streams from any portion of a treatment facility.
8. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.
9. "Executive Secretary" means Executive Secretary of the Utah Water Quality Board.
10. "EPA" means the United States Environmental Protection Agency.
11. "Act" means the *Utah Water Quality Act*.

12. "CWA" means *The Federal Water Pollution Control Act*, as amended, by *The Clean Water Act of 1987*.
13. "Storm water" means storm water runoff, snow melt runoff, and surface runoff and drainage.

**B. Description of Discharge Point(s).**

The authorization to discharge provided under this permit is limited to those outfalls specifically designated below as discharge locations. Discharges at any location not authorized under an UPDES permit is a violation of the *Act* and may be subject to penalties under the *Act*. Knowingly discharging from an unauthorized location or failing to report an unauthorized discharge may be subject to criminal penalties as provided under the *Act*.

Outfall Number

Location of Discharge Point(s)

001

12" outfall pipe to Cottonwood Creek, on the southeast corner of the lagoon system, at latitude 39° 11' 30" and longitude 111° 00' 30".

**C. Narrative Standard.**

It shall be unlawful, and a violation of this permit, for the permittee to discharge or place any waste or other substance in such a way as will be or may become offensive such as unnatural deposits, floating debris, oil, scum or other nuisances such as color, odor or taste, or cause conditions which produce undesirable aquatic life or which produce objectionable tastes in edible aquatic organisms; or result in concentrations or combinations of substances which produce undesirable physiological responses in desirable resident fish, or other desirable aquatic life, or undesirable human health effects, as determined by bioassay or other tests performed in accordance with standard procedures.

**D. Specific Limitations and Self-Monitoring Requirements.**

1. Effective immediately and lasting the duration of this permit, the permittee is authorized to discharge from Outfall 001. Such discharges shall be limited and monitored by the permittee as specified below:

Parameter	Effluent Limitations <i>a/</i>			
	Maximum Monthly Average	Maximum Weekly Average	Daily Minimum	Daily Maximum
BOD <sub>5</sub> , mg/L	25	35	NA	NA
BOD <sub>5</sub> Min. % Removal	85	NA	NA	NA
TSS, mg/L	25	35	NA	NA
TSS Min. % Removal	85	NA	NA	NA
E. Coli, No./100mL	126	158	NA	NA
Dissolved Oxygen, mg/L	NA	NA	5.0	NA
TRC, mg/L, <i>d/</i>	NA	NA	NA	0.07
NH <sub>3</sub> -N, mg/L	NA	NA	NA	4
TDS, mg/L, <i>e/</i>	NA	NA	NA	3500
TDS, tons/day/year, <i>e/</i>	NA	NA	NA	1.0/366
pH, Standard Units(SU)	NA	NA	6.5	9.0
Total Effluent Flow, MGD, <i>b/</i>	0.7	NA	NA	NA

Oil & Grease, mg/L, <u>f/</u>	NA	NA	NA	10
NA – Not Applicable;      mg/L – milligrams per liter;      MGD – million gallons per day				

Self-Monitoring and Reporting Requirements <u>a/</u>			
Parameter	Frequency	Sample Type	Units
Total Flow, <u>b/</u>	Continuous	Recorder	MGD
BOD <sub>5</sub> , Influent, <u>c/</u> Effluent	Twice Monthly	Grab	mg/L
	Twice Monthly	Grab	mg/L
TSS, Influent, <u>c/</u> Effluent	Twice Monthly	Grab	mg/L
	Twice Monthly	Grab	mg/L
E. Coli	Twice Monthly	Grab	No./100mL
NH <sub>3</sub> -N	Twice Monthly	Grab	mg/L
TRC, <u>d/</u>	Daily (only if chlorinating)	Grab	mg/L
Dissolved Oxygen	Twice Monthly	Grab	mg/L
TDS, <u>e/</u>	Twice Monthly	Grab	mg/L, tons/day/year
pH	Twice Monthly	Grab	SU
Oil & Grease, <u>f/</u>	Twice Monthly	Visual, Grab	Yes/No, mg/L

TRC – total residual chlorine

NH<sub>3</sub>-N – ammonia as nitrogen

Percentage Removal Requirements [Total Suspended Solids (TSS) and Biochemical Oxygen Demand (BOD<sub>5</sub>) Limitation]: In addition to the concentration limitation on TSS and BOD<sub>5</sub> indicated above, the arithmetic mean for the TSS and BOD<sub>5</sub> concentration for effluent samples collected in a period of thirty (30) consecutive days shall not exceed fifteen (15) percent of the arithmetic mean of the concentration for influent samples collected at approximately the same times during the same period (85 percent removal).

There shall be no visible sheen or floating solids or visible foam in other than trace amounts upon any discharges.

There shall be no discharge of untreated sanitary wastes.

a/ See Definitions, *Part I.A*, for definition of terms.

b/ If the rate of discharge is controlled, the rate and duration of discharge shall be reported. Flow measurements of influent/effluent volume shall be made in such a manner that the permittee can affirmatively demonstrate that representative values are being obtained.

c/ In addition to monitoring the final discharge, influent samples shall be taken and analyzed for this constituent at the same frequency as required for this constituent in the discharge.

d/ TRC shall be analyzed only if the effluent is chlorinated, otherwise NA.

e/ In addition to the total dissolved solids (TDS) effluent concentration limitation, TDS effluent loading is limited to one-ton/day. If the one-ton/day effluent loading limitation cannot be met, then the permittee is limited to 366-tons/year total TDS effluent loading from the facility. It is the responsibility of the permittee to maintain annual TDS loading information and upon request the permittee shall submit to the Executive Secretary the annual TDS loading information. It is also

recommended that the facility conduct an Inflow/Infiltration (I&I) study to determine the extent of I&I from ground water into their collection systems, followed by a project to repair or replace defective sewer piping, if applicable.

- f/ Oil and grease shall be a visual test. If any oil and/or grease sheens are observed visually, then a sample of the effluent must be taken and this sample shall not exceed 10 mg/L.

2. Additional Reporting Requirements.

Because the design capacity of this municipal wastewater treatment facility is less than 5 MGD, the permittee will not be required to develop a State-approved industrial pretreatment program at this time. However, in order to determine if development of an industrial pretreatment program is warranted, the permittee shall conduct an **industrial waste survey**, as described in Part III.I.1, and submit it to the Division of Water Quality within **sixty (60) calendar days** of the effective date of this permit.

II MONITORING, RECORDING AND REPORTING REQUIREMENTS

- A. Representative Sampling. Samples taken in compliance with the monitoring requirements established under *Part I* shall be collected from the effluent stream prior to discharge into the receiving waters. Samples and measurements shall be representative of the volume and nature of the monitored discharge. Sludge samples shall be collected at a location representative of the quality of sludge immediately prior to the use-disposal practice.
- B. Monitoring Procedures. Monitoring must be conducted according to test procedures approved under *Utah Administrative Code ("UAC") R317-2-10*, unless other test procedures have been specified in this permit.
- C. Penalties for Tampering. The *Act* provides that any person who falsifies, tampers with, or knowingly renders inaccurate, any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than six months per violation, or by both.
- D. Reporting of Monitoring Results. Monitoring results obtained during the previous month shall be summarized for each month and reported on a Discharge Monitoring Report Form (EPA No. 3320-1) or by NetDMR, post-marked or entered into NetDMR no later than the 28<sup>th</sup> day of the month following the completed reporting period. If no discharge occurs during the reporting period, "no discharge" shall be reported. Legible copies of these, and all other reports including whole effluent toxicity (WET) test reports required herein, shall be signed and certified in accordance with the requirements of *Signatory Requirements (see Part VII.G)*, and submitted by NetDMR, or to the Division of Water Quality at the following address:
- original to:           Department of Environmental Quality  
                                  Division of Water Quality  
                                  PO Box 144870  
                                  Salt Lake City, Utah 84114-4870
- E. Compliance Schedules. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any Compliance Schedule of this permit shall be submitted no later than 14 days following each schedule date.
- F. Additional Monitoring by the Permittee. If the permittee monitors any parameter more frequently than required by this permit, using test procedures approved under *UAC R317-2-10* or as specified in this permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR. Such increased frequency shall also be indicated. Only those parameters required by the permit need to be reported.
- G. Records Contents. Records of monitoring information shall include:
1. The date, exact place, and time of sampling or measurements;
  2. The individual(s) who performed the sampling or measurements;
  3. The date(s) and time(s) analyses were performed;
  4. The individual(s) who performed the analyses;
  5. The analytical techniques or methods used; and,
  6. The results of such analyses.
- H. Retention of Records. The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for

continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least five years from the date of the sample, measurement, report or application. This period may be extended by request of the Executive Secretary at any time. A copy of this UPDES permit must be maintained on site during the duration of activity at the permitted location.

**I. Twenty-four Hour Notice of Noncompliance Reporting.**

1. The permittee shall (orally) report any noncompliance which may seriously endanger health or environment as soon as possible, but no later than twenty-four (24) hours from the time the permittee first became aware of circumstances. The report shall be made to the Division of Water Quality, (801) 538-6146, or 24 hour answering service (801) 536-4123.
2. The following occurrences of noncompliance shall be reported by telephone (801) 536-4123 as soon as possible but no later than 24 hours from the time the permittee becomes aware of the circumstances:
  - a. Any noncompliance which may endanger health or the environment;
  - b. Any unanticipated bypass which exceeds any effluent limitation in the permit (See *Part III.G, Bypass of Treatment Facilities.*);
  - c. Any upset which exceeds any effluent limitation in the permit (See *Part III.H, Upset Conditions.*); or,
  - d. Violation of a maximum daily discharge limitation for any of the pollutants listed in the permit.
3. A written submission shall also be provided within five days of the time that the permittee becomes aware of the circumstances. The written submission shall contain:
  - a. A description of the noncompliance and its cause;
  - b. The period of noncompliance, including exact dates and times;
  - c. The estimated time noncompliance is expected to continue if it has not been corrected; and,
  - d. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.
  - e. Steps taken, if any, to mitigate the adverse impacts on the environment and human health during the noncompliance period.
1. The Executive Secretary may waive the written report on a case-by-case basis if the oral report has been received within 24 hours by the Division of Water Quality, (801) 538-6146.
  - a. Reports shall be submitted to the addresses in *Part II.D, Reporting of Monitoring Results.*



- J. Other Noncompliance Reporting. Instances of noncompliance not required to be reported within 24 hours shall be reported at the time that monitoring reports for *Part II.D* are submitted. The reports shall contain the information listed in *Part II.I.3*.
- K. Inspection and Entry. The permittee shall allow the Executive Secretary, or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to:
1. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of the permit;
  2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
  3. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and,
  4. Sample or monitor at reasonable times, for the purpose of assuring permit compliance or as otherwise authorized by the *Act*, any substances or parameters at any location.

III. COMPLIANCE RESPONSIBILITIES

- A. Duty to Comply. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. The permittee shall give advance notice to the Executive Secretary of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.
- B. Penalties for Violations of Permit Conditions. The Act provides that any person who violates a permit condition implementing provisions of the Act is subject to a civil penalty not to exceed \$10,000 per day of such violation. Any person who willfully or negligently violates permit conditions or the Act is subject to a fine not exceeding \$25,000 per day of violation. Any person convicted under UCA 19-5-115(2) a second time shall be punished by a fine not exceeding \$50,000 per day. Except as provided at Part III.G, Bypass of Treatment Facilities and Part III.H, Upset Conditions, nothing in this permit shall be construed to relieve the permittee of the civil or criminal penalties for noncompliance.
- C. Need to Halt or Reduce Activity not a Defense. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
- D. Duty to Mitigate. The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.
- E. Proper Operation and Maintenance. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.
- F. Removed Substances. Collected screening, grit, solids, sludges, or other pollutants removed in the course of treatment shall be disposed of in such a manner so as to prevent any pollutant from entering any waters of the state or creating a health hazard. Sludge/digester supernatant and filter backwash shall not directly enter either the final effluent or waters of the state by any other direct route.
- G. Bypass of Treatment Facilities.
1. Bypass Not Exceeding Limitations. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to 2. and 3. of this section.
  2. Prohibition of Bypass.
    - a. Bypass is prohibited, and the Executive Secretary may taken enforcement action against a permittee for bypass, unless:

- (1) Bypass was unavoidable to prevent loss of human life, personal injury, or severe property damage;
  - (2) There were no feasible alternatives to bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate backup equipment should have been installed in the exercise of reasonable engineering judgement to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance, and
  - (3) The permittee submitted notices as required under section G.3.
2. The executive Secretary may approve an anticipated bypass, after considering its adverse effects, if the Executive Secretary determines that it will meet the three conditions listed in sections G.2a. (1), (2) and (3).
3. Notice.
  - a. Anticipated bypass. Except as provided above in section G.2. and below in section G. 3.b, if the permittee knows in advance of the need for a bypass, it shall submit prior notice, at least ninety days before the date of bypass. The prior notice shall include the following unless otherwise waived by the Executive Secretary:
    - (1) Evaluation of alternative to bypass, including cost-benefit analysis containing an assessment of anticipated resource damages;
    - (2) A specific bypass plan describing the work to be performed including scheduled dates and times. The permittee must notify the Executive Secretary in advance of any changes to the bypass schedule;
    - (3) Description of specific measures to be taken to minimize environmental and public health impacts;
    - (4) A notification plan sufficient to alert all downstream users, the public and others reasonably expected to be impacted by the bypass;
    - (5) A water quality assessment plan to include sufficient monitoring of the receiving water before, during and following the bypass to enable evaluation of public health risks and environmental impacts; and
    - (6) Any additional information requested by the Executive Secretary. .
  - b. Emergency Bypass. Where ninety days advance notice is not possible, the permittee must notify the Executive Secretary, and the Director of the Department of Natural Resources, as soon as it becomes aware of the need to bypass and provide to the Executive Secretary the information in section G.3.a.(1) through (6i) to the extent practicable.
  - c. Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass to the Executive Secretary as required under Part II.I., Twenty Four Hour Reporting. The permittee shall also immediately notify the Director of

the Department of Natural Resources, the public and downstream users and shall implement measures to minimize impacts to public health and environment to the extent practicable.

H. Upset Conditions.

1. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with technology based permit effluent limitations if the requirements of paragraph 2. of this section are met. Executive Secretary's administrative determination regarding a claim of upset cannot be judiciously challenged by the permittee until such time as an action is initiated for noncompliance.
2. Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
  - a. An upset occurred and that the permittee can identify the cause(s) of the upset;
  - b. The permitted facility was at the time being properly operated;
  - c. The permittee submitted notice of the upset as required under *Part II.I, Twenty-four Hour Notice of Noncompliance Reporting*; and,
  - d. The permittee complied with any remedial measures required under *Part III.D, Duty to Mitigate*.
4. Burden of proof. In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.

I. Industrial Wastes

1. The "Industrial Waste Survey" as required by Part I.D.2., consists of; identifying each significant industrial user (SIU), determination of the qualitative and quantitative characteristics of each discharge, and appropriate production data. A (SIU) is defined as an industrial user discharging to a publicly-owned treatment works (POTW) that satisfies any of the following: (1) has a process wastewater flow of 25,000 gallons or more per average work day; (2) has a flow greater than five percent of the flow carried by the municipal system receiving the waste; (3) is subject to Categorical Pretreatment Standards, or (4) has a reasonable potential for adversely affecting the POTW's operation or for violating any pretreatment standard or requirement.
2. The permittee must notify the Executive Secretary of any new introductions by new or existing SIUs or any substantial change in pollutants from any major industrial source. Such notice must contain the information described in 1. above and be forwarded no later than sixty (60) days following the introduction or change.
3. Pretreatment Standards (40 CFR 403.5) developed pursuant to *Section 307 of The Water Quality Act of 1987* require that under no circumstances shall the permittee allow introduction of the following pollutants into the waste treatment system from any source of non-domestic discharge:

- a. Pollutants which create a fire or explosion hazard in the publicly owned treatment works (POTW), including, but not limited to, waste streams with a closed cup flashpoint of less than 140°F (60°C);
  - b. Pollutants which will cause corrosive structural damage to the POTW, but in no case, discharges with a pH lower than 5.0;
  - c. Solid or viscous pollutants in amounts which will cause obstruction to the flow in the POTW resulting in interference;
  - d. Any pollutant, including oxygen demanding pollutants (BOD, etc.) released in a discharge at such volume or strength as to cause interference in the POTW;
  - e. Heat in amounts which will inhibit biological activity in the POTW, resulting in interference, but in no case, heat in such quantities that the influent to the sewage treatment works exceeds 104°F (40°C);
  - f. Petroleum oil, non-biodegradable cutting oil, or products of mineral oil origin in amounts that will cause interference or pass through;
  - g. Pollutants which result in the presence of toxic gases, vapor, or fumes within the POTW in a quantity that may cause worker health or safety problems; or,
  - h. Any trucked or hauled pollutants, except at discharge points designated by the POTW.
  - i. Any pollutant that causes pass through or interference at the POTW.
4. In addition to the general and specific limitations expressed above, more specific pretreatment limitations have been and will be promulgated for specific industrial categories under *Section 307 of the Water Quality Act of 1987 as amended (WQA)*. (See 40 CFR, Subchapter N, Parts 400 through 500, for specific information).
  5. The permittee shall provide adequate notice to the Division of Water Quality and the Director, Water Management Division of;
    - a. Any new introduction of pollutants into the treatment works from an indirect discharger (i.e., industrial user) which would be subject to *Sections 301 or 306* of the *WQA* if it were directly discharging those pollutants;
    - b. Any substantial change in the volume or character of pollutants being introduced into the treatment works by a source introducing pollutants into the treatment works at the time of issuance of the permit; and
    - c. For the purposes of this section, adequate notice shall include information on:
      - (1) The quality and quantity of effluent to be introduced into such treatment works; and
      - (2) Any anticipated impact of the change on the quantity or quality of effluent to be discharged from such publicly owned treatment works.

6. At such time as a specific pretreatment limitation becomes applicable to an industrial user of the permittee, the Executive Secretary may, as appropriate, do the following:
  - a. Amend the permittee's UPDES discharge permit to specify the additional pollutant(s) and corresponding effluent limitation(s) consistent with the applicable national pretreatment limitation;
  - b. Require the permittee to specify, by ordinance, contract, or other enforceable means, the type of pollutant(s) and the maximum amount which may be discharged to the permittee's facility for treatment. Such requirement shall be imposed in a manner consistent with the POTW program development requirements of the *General Pretreatment Regulations* at 40 CFR 403; and/or,
  - c. Require the permittee to monitor its discharge for any pollutant which may likely be discharged from the permittee's facility, should the industrial user fail to properly pretreat its waste.
7. The Executive Secretary retains, at all times, the right to take legal action against the industrial user and/or the treatment works, in those cases where a permit violation has occurred because of the failure of an industrial user to discharge at an acceptable level. If the permittee has failed to properly delineate maximum acceptable industrial contributor levels, the Executive Secretary will look primarily to the permittee as the responsible party.
8. If local limits are developed per R317-8-8.5 (4) (b) to protect the POTW from pass through or interference then the POTW must submit limits to the DWQ for review and public notice R317-8-8.5 (4) (c).

IV. GENERAL REQUIREMENTS

- A. Planned Changes. The permittee shall give notice to the Executive Secretary as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when the alteration or addition could significantly change the nature or increase the quantity of parameters discharged. This notification applies to pollutants which are not subject to effluent limitations in the permit. In addition, if there are any planned substantial changes to the permittee's existing sludge facilities or their manner of operation or to current sludge management practices of storage and disposal, the permittee shall give notice to the Executive Secretary of any planned changes at least 30 days prior to their implementation.
- B. Anticipated Noncompliance. The permittee shall give advance notice to the Executive Secretary of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.
- C. Permit Actions. This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.
- D. Duty to Reapply. If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee shall apply for and obtain a new permit. The application shall be submitted at least 180 days before the expiration date of this permit.
- E. Duty to Provide Information. The permittee shall furnish to the Executive Secretary, within a reasonable time, any information which the Executive Secretary may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the Executive Secretary, upon request, copies of records required to be kept by this permit.
- F. Other Information. When the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or any report to the Executive Secretary, it shall promptly submit such facts or information.
- G. Signatory Requirements. All applications, reports or information submitted to the Executive Secretary shall be signed and certified.
  - 1. All permit applications shall be signed by either a principal executive officer or ranking elected official.
  - 2. All reports required by the permit and other information requested by the Executive Secretary shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:
    - a. The authorization is made in writing by a person described above and submitted to the Executive Secretary, and,
    - b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility, such as the position of plant manager, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for

environmental matters. A duly authorized representative may thus be either a named individual or any individual occupying a named position.

3. Changes to authorization. If an authorization under paragraph *IV.G.2* is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of paragraph *IV.G.2* must be submitted to the Executive Secretary prior to or together with any reports, information, or applications to be signed by an authorized representative.
4. Certification. Any person signing a document under this section shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

- H. Penalties for Falsification of Reports. The *Act* provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance shall, upon conviction be punished by a fine of not more than \$10,000.00 per violation, or by imprisonment for not more than six months per violation, or by both.
- I. Availability of Reports. Except for data determined to be confidential under *UAC R317-8-3.2*, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the office of Executive Secretary. As required by the *Act*, permit applications, permits and effluent data shall not be considered confidential.
- J. Oil and Hazardous Substance Liability. Nothing in this permit shall be construed to preclude the permittee of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under the *Act*.
- K. Property Rights. The issuance of this permit does not convey any property rights of any sort, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations.
- L. Severability. The provisions of this permit are severable, and if any provisions of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.
- M. Transfers. This permit may be automatically transferred to a new permittee if:
  1. The current permittee notifies the Executive Secretary at least 20 days in advance of the proposed transfer date;



2. The notice includes a written agreement between the existing and new permittees containing a specific date for transfer of permit responsibility, coverage, and liability between them; and,
  3. The Executive Secretary does not notify the existing permittee and the proposed new permittee of his or her intent to modify, or revoke and reissue the permit. If this notice is not received, the transfer is effective on the date specified in the agreement mentioned in paragraph 2 above.
- N. State Laws. Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable state law or regulation under authority preserved by UCA 19-5-117.
- O. Water Quality - Reopener Provision. This permit may be reopened and modified (following proper administrative procedures) to include the appropriate effluent limitations and compliance schedule, if necessary, if one or more of the following events occurs:
1. Water Quality Standards for the receiving water(s) to which the permittee discharges are modified in such a manner as to require different effluent limits than contained in this permit.
  2. A final wasteload allocation is developed and approved by the State and/or EPA for incorporation in this permit.
  3. A revision to the current Water Quality Management Plan is approved and adopted which calls for different effluent limitations than contained in this permit.
- P. Toxicity Limitation-Reopener Provision. This permit may be reopened and modified (following proper administrative procedures) to include whole effluent toxicity (WET) testing, a WET limitation, a compliance date, additional or modified numerical limitations, or any other conditions related to the control of toxicants if toxicity is detected during the life of this permit.
- Q. Storm Water-Reopener Provision. At any time during the duration (life) of this permit, this permit may be reopened and modified (following proper administrative procedures) as per UAC R317.8, to include, any applicable storm water provisions and requirements, a storm water pollution prevention plan, a compliance schedule, a compliance date, monitoring and/or reporting requirements, or any other conditions related to the control of storm water discharges to "waters-of-State".

**FACT SHEET STATEMENT OF BASIS  
CASTLE VALLEY SPECIAL SERVICE DISTRICT  
CASTLE DALE WASTEWATER TREATMENT PLANT  
UPDES PERMIT NUMBER: UT0023663  
MINOR MUNICIPAL RENEWAL PERMIT**

**FILE COPY**

**FACILITY CONTACT AND INFORMATION**

Jacob Sharp, District Manager  
Castle Valley Special Service District  
Castle Dale Lagoons  
P.O. Box 877  
Castle Dale, UT 84523  
Telephone (435) 381-5333

**DESCRIPTION OF FACILITY AND DISCHARGE**

The Castle Valley Special Service District's Castle Dale Wastewater Treatment Facility (Castle Dale) serves the cities of Castle Dale and Orangeville with a current total population of approximately 3,055. The Castle Dale design capacity is for a population equivalent of 7,020 and an average daily treatment flow of 0.7 million gallons per day (MGD). The facility consists of 4 lagoon cells, which are mechanically aerated and with a total area of 49.9 acres. The first cell is 30 acres in size followed by three smaller lagoon cells of 6-7 acres each, which are then followed by three alternating, intermittent sand filters. The discharge location, referred to as outfall number 001, is from a 12-inch pipe near the southeast corner of the lagoon system following the sand filters and chlorine treatment building. The discharge is to Cottonwood Creek at latitude 39°11'30" and longitude 111°00'30".

**RECEIVING WATERS AND STREAM CLASSIFICATION**

The discharge flows into Cottonwood Creek, which is part of the San Rafael and Colorado River systems. Cottonwood Creek is classified according to *Utah Administrative Code (UAC) R317-2-13* as follows:

- |          |   |
|----------|---|
| Class 2B | -protected for secondary contact recreation (boating, wading and similar uses).                                     |
| Class 3C | -protected for non-game fish and other aquatic life, including the necessary aquatic organisms in their food chain. |
| Class 4  | -protected for agricultural uses including irrigation of crops.   |

**BASIS FOR EFFLUENT LIMITATIONS**

Limitations on total suspended solids (TSS), 5-day biochemical oxygen demand (BOD<sub>5</sub>), E. coli, pH and percent removal for TSS and BOD<sub>5</sub> are based on current Utah Secondary Treatment Standards, *Utah Administrative Code (UAC) R317-1-3*. Ammonia as Nitrogen (NH<sub>3</sub>-N), dissolved oxygen (DO), total residual chlorine (TRC) and total flow limitations are water quality based, and were derived by the waste load analysis as described in a latter section of this document. Oil and Grease limitations are based on best professional judgment in the event that an oil or grease sheen is visually observed, which is consistent with similar facilities throughout Utah.

Discharges from Castle Dale eventually reach the Colorado River, which places it in the guidance of the Colorado River Basin Salinity Control Forum (CRBSCF). Total dissolved solids (TDS) are limited in

loading by the CRBSCF and in February 1977 they produced the “Policy For Implementation of Colorado River Salinity Standards Through the NPDES Permit Program” (Policy). This Policy is still in effect and under Part II (Municipal Discharges) it states, “...Requirements for establishing incremental increases may be waived in those cases where the incremental salt load reaching the main stem of the Colorado River is less than one ton per day or 366 tons per year.” Castle Dale is an intermittent discharger, discharging less than 150 tons per year total TDS on average. Therefore, the effluent will once again be limited to a maximum discharge of 1.0 ton per day or 366 tons per year of TDS. It is the responsibility of the permittee to maintain annual TDS loading information and submit it to the Executive Secretary.

The TDS concentration limit of 3,500 mg/L is based upon the approved Total Maximum Daily Load (TMDL) study for the San Rafael watershed (which includes Cottonwood Creek), in which a site specific criterion was developed for TDS and can be found in Table A-12 of the document entitled, “Price River, San Rafael River, and Muddy Creek TMDLs for Total Dissolved Solids, West Colorado Watershed Management Unit, Utah”, EPA Approval Date: August 4, 2004.

### **EFFLUENT LIMITATIONS & SELF MONITORING AND REPORTING REQUIREMENTS**

A review of the past three years of monitoring data reveals only two permit limit excursions, both for e-coli in 2009. This data has been compiled and is included as an attachment hereto. Based on previous monitoring data, the permittee is expected to be able to continue to comply with the following effluent limitations upon future discharges:

Parameter	Effluent Limitations			
	Maximum Monthly Average	Maximum Weekly Average	Daily Minimum	Daily Maximum
BOD <sub>5</sub> , mg/L	25	35	NA	NA
BOD <sub>5</sub> Min. % Removal	85	NA	NA	NA
TSS, mg/L	25	35	NA	NA
TSS Min. % Removal	85	NA	NA	NA
E. Coli, No./100mL	126	158	NA	NA
TRC, mg/L, a/	NA	NA	NA	0.07
NH <sub>3</sub> -N, mg/L	NA	NA	NA	4.0
TDS, mg/L	NA	NA	NA	3,500
TDS, tons/day/year, b/	NA	NA	NA	1.0/366
pH, Standard Units(SU)	NA	NA	6.5	9.0
Dissolved Oxygen, mg/L	NA	NA	5.0	NA
Total Effluent Flow, MGD	0.7	NA	NA	Report
Oil & Grease, mg/L, c/	NA	NA	NA	10

NA – Not Applicable

mg/L – milligrams per liter

MGD – million gallons per day

Discharge monitoring report (DMR) forms shall be submitted monthly and are due 28 days after the end of the monitoring period and shall include the following self-monitoring and reporting information:

Self-Monitoring and Reporting Requirements			
Parameter	Frequency	Sample Type	Units
Total Flow	Continuous	Recorder	MGD
BOD <sub>5</sub> , Influent	Twice Monthly	Grab	mg/L

Effluent	Twice Monthly	Grab	mg/L
TSS, Influent	Twice Monthly	Grab	mg/L
Effluent	Twice Monthly	Grab	mg/L
E. Coli	Twice Monthly	Grab	No./100mL
NH <sub>3</sub> -N	Twice Monthly	Grab	mg/L
TRC, a/	Daily, only if chlorinating	Grab	mg/L
Dissolved Oxygen	Twice Monthly	Grab	mg/L
TDS, b/	Twice Monthly	Grab	mg/L, tons/day/year
pH	Twice Monthly	Grab	SU
Oil & Grease, c/	Twice Monthly	Visual, Grab	Yes/No, mg/L

a/ TRC shall be analyzed only if the effluent is chlorinated prior to discharge.

b/ In addition to the total dissolved solids (TDS) effluent concentration limitation, TDS effluent loading is limited to one-ton/day. If the one-ton/day effluent loading limitation cannot be met, then the permittee is limited to 366-tons/year total TDS effluent loading from the facility. It is the responsibility of the permittee to maintain annual TDS loading information and upon request the permittee shall submit to the Executive Secretary the annual TDS loading information. It is also recommended that the facility conduct an Inflow/Infiltration (I&I) study to determine the extent of I&I from ground water into their collection systems, followed by a project to repair or replace defective sewer piping, if applicable.

c/ Oil and grease shall be a visual test. If any oil and/or grease sheens are observed visually, then a sample of the effluent must be taken and this sample shall not exceed 10 mg/L.

### **WASTE LOAD ANALYSIS AND ANTIDegradation REVIEW**

Effluent limitations are also derived using a waste load analysis (WLA), which is appended to this statement of basis as ADDENDUM. The WLA incorporates Secondary Treatment Standards, Water Quality Standards, Antidegradation Reviews (ADR), as appropriate and designated uses into a water quality model that projects the effects of discharge concentrations on receiving water quality. Effluent limitations are those that the model demonstrates are sufficient to meet State water quality standards in the receiving waters. During this UPDES renewal permit development, a WLA and ADR were performed. An ADR Level I review was performed and concluded that an ADR Level II review was not required (see page 20 of the attached WLA for more details). The WLA indicates that the existing effluent limitations should be sufficiently protective of water quality, in order to meet State water quality standards in the receiving waters. The potential discharge was evaluated and determined not to cause a violation of State Water Quality Standards in downstream receiving waters.

### **SIGNIFICANT CHANGES FROM PREVIOUS PERMIT**

The only changes in this permit renewal from the existing permit is the inclusion of a TDS concentration limit, as previously described to reflect the TMDL study as appropriate. Total flow, Ammonia, TRC and DO limitations have been modified to reflect the current WLA as well. All other permit provisions remain unchanged.

### **STORM WATER REQUIREMENTS**

Wastewater treatment facilities, which includes treatment lagoons, are required to comply with storm water permit requirements if they meet one or both of the following criteria,

1. The facility has an approved pretreatment program as described in *40 CFR Part 403*.
2. The facility has a design flow of 1.0 MGD or greater.

The Castle Dale lagoons facility does not meet either of the criteria; therefore a storm water permit is not required at this time. However, a storm water re-opener provision is included in the permit should a storm water permit be needed in the future, following proper administrative procedures as per *UAC R317-8*, to include any applicable storm water provisions and requirements if appropriate.

### **PRETREATMENT REQUIREMENTS**

Although the permittee does not have a State-approved pretreatment program, any wastewater discharges to the sanitary sewer by industrial users are subject to Federal, State and local pretreatment regulations. Pursuant to *Section 307* of the *Clean Water Act*, the permittee shall comply with all applicable Federal General Pretreatment Regulations promulgated, found in *40 CFR 403* and the State Pretreatment Requirements found in *UAC R317-8-8*.

The permittee has not been designated for pretreatment program development because it does not meet conditions which necessitate a full program. The flow through the plant is less than five (5) MGD, there are no categorical industries discharging to the plant, industrial discharges comprise less than 10 percent of the flow through the plant, and there is no indication of pass through or interference with the operation of the plant such as upsets or violations of the POTW's UPDES permit limits. However, the permittee is required to conduct an Industrial Wastewater Survey, as described in Part I.D.2 of the draft permit, in order to assess the need for the future development of a pretreatment program.

### **BIOMONITORING REQUIREMENTS**

As part of a nationwide effort to control toxic discharges, biomonitoring requirements are being included in permits for facilities where effluent toxicity is an existing or potential concern. In Utah, this is done in accordance with the *State of Utah Permitting and Enforcement Guidance Document for Whole Effluent Toxicity Control (Biomonitoring)*. Authority to require effluent biomonitoring is provided in *Permit Conditions, UAC R317-8-4.2, Permit Provisions, UAC R317-8-5.3* and *Water Quality Standards, UAC R317-2-5 and R317-2-7.2*.

The permittee is a minor municipal intermittent discharging facility with no significant industrial users on the system to date. Discharges will continue to be primarily from domestic sources only, which contributes a small volume of effluent when compared to the existing stream flows, in which toxicity is neither an existing concern, nor likely to be present in the discharge. Based on these considerations, there is no reasonable potential for toxicity in the permittee's discharge (*per State of Utah Permitting and Enforcement Guidance Document for WET Control*). As such, there will be no numerical WET limitations or WET monitoring requirements in this permit. However, the permit will contain a toxicity limitation re-opener provision that allows for modification of the permit should additional information indicate the presence of toxicity in future discharges.

### **BIOSOLIDS MANAGEMENT REQUIREMENTS**

Because the permitted facility is a lagoon system, there is no regular sludge production. Therefore, the requirements of *40 CFR 503* do not apply unless or until sludge is removed from the bottom of the lagoon and used or disposed in some way. When planning sludge removal, the permittee should contact DWQ or EPA for guidance.

**PERMIT DURATION**

As stated in *UAC R317-8-5.1(1)*, UPDES permits shall be effective for a fixed term not to exceed five (5) years.

Drafted by Jeff Studenka  
Environmental Scientist  
Utah Division of Water Quality  
March 1, 2010

**ADDENDUM TO FACT SHEET STATEMENT OF BASIS - June 10, 2010**

This draft renewal UPDES permit was Public Noticed from April 27, 2010 to May 28, 2010 on DEQ/DWQ's websites and also appeared in the Emery County Progress on April 27, 2010. No public comments were received and EPA has reviewed with no further comment as well. Staff recommends re-issuance of this permit as drafted.